

REMARKS

The Examiner's attention to the present application is noted with appreciation. The Examiner objected to the drawings under 37 CFR 1.83(a) as not showing every feature of the invention specified in the claims. Applicant has canceled claims 15, 16, and 25, thereby removing the missing features from the claims.

The Examiner rejected claims 7-20, 22, and 24-28 under 35 U.S.C. 103(a) as being unpatentable over Moreau in view of Zollinger et al. and in further view of Marvin et al. Such rejection is respectfully traversed. The present invention requires a measuring head, carrier member(s), and cable reel which are **separate**. Further, these elements must be connected by coupling tubes which have "a diameter substantially smaller than a diameter of said carrier member".

Moreau et al. disclose an ultrasonic measuring head integrated with the necessary electronics (reference numbers **4-8**), not a separate ultrasonic measuring head, separate carrier members and a separate cable reel. Further, in the apparatus of Zollingger et al. these elements are also not separate, but connected together into a continuous, flexible rabbit by solid polyurethane seal sections **50**. These sections are approximately the same diameter as body modules **26**, and in fact comprise seal **51** which has a larger diameter than that of the body modules. Communication wire **60** does not have sufficient tensile rigidity to propel the apparatus of Zollingger et al. through the pipe; large diameter seal sections **50** are required to perform this function. Further, as the Examiner notes, neither reference discloses the ability of the disclosed device to traverse 1D pipe bends. Thus the combination of these two references does not teach or suggest all the claim limitations, as required by MPEP 2143.03.

As the Examiner notes, Marvin et al. disclose 1D bends. However, Marvin et al. teaches away from combining it with Zollingger et al. "It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983)" (MPEP 2145 X.D.2). Marvin states that "the large number of return bends in a section of tubes makes the use of inspection tools with a connecting cable or tether impossible beyond a certain number of bends" (col. 2, lines 8-11), and "another object of this invention is to provide such an apparatus which is untethered and is driven by fluid pressure" (col. 2, lines 49-51). Thus one skilled in the art would not

combine the device of Marvin et al. with one (such as that disclosed by Zollingger et al.) which uses a tether, since there would be no reasonable expectation of success (MPEP 2143.02). Further, according to its own teachings, adding a cable or tether to the device of Marvin et al. would render it unsuitable for its intended purpose. "If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification" (MPEP 2143.01).

Thus, in general, because Marvin et al. may not properly be combined with a reference which teaches a tether or cable, and because the present claims require the use of a cable, and because any combination of references cited must suggest or teach all of the claim limitations, the references cited by the Examiner may not be used to establish a *prima facie* case of obviousness.

The Examiner also rejected claims 21 and 23 under 35 U.S.C. 103(a) as being unpatentable over Moreau in view of Zollinger et al. and Marvin et al. and further in view of Wernicke. Such rejection is respectfully traversed. In addition to the arguments above, contrary to the Examiner's assertions, Wernicke does not disclose hydraulic tubes as flexible couplings. The hydraulic hose 214 of Wernicke is analogous to the cable in the present invention, **not** the flexible coupling tubes (see Wernicke col. 15, lines 27-33). Further, the couplings 202, 204 actually disclosed by Wernicke are not flexible tubes with a steel covering, but inflexible solid elements connected by U-joint 203. Thus Wernicke does not suggest the use of hydraulic tubes as couplings, whether or not they comprise a steel covering.

In view of the above amendments and remarks, it is respectfully submitted that all grounds of rejection and objection have been traversed. It is believed that the case is now in condition for allowance and same is respectfully requested.

If any issues remain, or if the Examiner believes that prosecution of this application might be expedited by discussion of the issues, the Examiner is cordially invited to telephone the undersigned attorney for Applicant at the telephone number listed below.

Also being filed herewith is a Petition for Extension of Time to February 22, 2004, which is the first business day after February 21, 2004, with the appropriate fee. A check for the additional claims fee is also being filed herewith. Authorization is given to charge payment of any additional fees required, or

credit any overpayment, to Deposit Acct. 13-4213. A duplicate of the Petition paper is enclosed for accounting purposes.

Respectfully submitted,

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